

Table 4

Conjugation of nicotine and metabolites during ad libitum cigarette smoking (CS) and transdermal nicotine (TDN)

	Nicotine		Cotinine		3-Hydroxycotinine	
	CS	TDN	CS	TDN	CS	TDN
% Conjugated <sup>a</sup>						
Mean	29.4	31.8	51.0	47.8	16.4	17.4
S.D.	14.8	16.8	19.0	20.2	10.6	6.9
Range	3.8-56.0	0-60.3	1.4-71.0	0-72.6	0.8-34.3	4.8-30.8
95% C.I. <sup>b</sup>	20.2-38.7	21.1-42.4	38.9-63.1	35.0-60.7	9.7-23.2	18.0-21.8
Ratio $\left[ \frac{\text{conjugated}}{\text{unconjugated}} \right]$						
Mean	0.48	0.56	1.27	1.18	0.22	0.22
S.D.	0.34	0.44	0.71	0.81	0.16	0.10
Range	0.04-1.27	0-1.51	0.01-2.44	0-2.65	0.01-0.52	0.05-0.44
95% C.I.	0.26-0.69	0.28-0.84	0.82-1.72	0.67-1.70	0.11-0.32	0.15-0.28

<sup>a</sup>% conjugated =  $\frac{\text{conjugated}}{\text{conjugated} + \text{unconjugated}} \times 100$ .

<sup>b</sup>C.I., confidence interval.

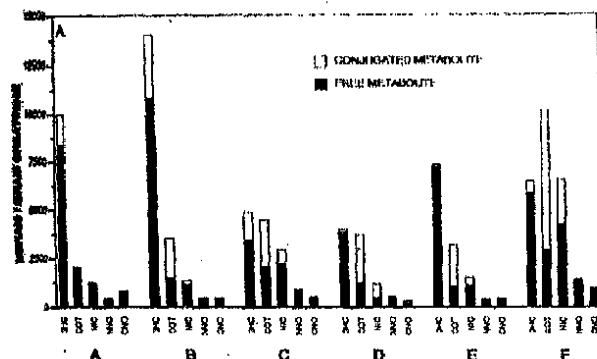


TABLE 5

Correlation table comparing extent of conjugation of nicotine, cotinine and 3'-hydroxycotinine within individuals<sup>a</sup>

	Cigarette Smoking		Transdermal Nicotine	
	NIC-G <sup>b</sup>	COT-G	NIC-G	COT-G
	%		%	
% COT-G <sup>b</sup>	0.72*	—	0.82**	—
% 3-HC-G	-0.25	0.07	-0.42	-0.50

\*  $P < .05$ .

\*\*  $P < .01$ .

<sup>a</sup>% conjugated =  $\left[ \frac{\text{excretion of glucuronide}}{\text{excretion of unconjugated + glucuronide}} \right] \times 100$ .

<sup>b</sup>NIC-G, nicotine glucuronide; COT-G, cotinine glucuronide; 3-HC-G, trans-3-hydroxycotinine glucuronide.